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THE ECONOMIES OF COMBINATION

The question of industrial combinations can be approached from many standpoints. The trust may be considered from the standpoint of its possible limitation of business opportunity. It can be considered in its relation to labor, to the railroads, to the tariff, to the banks, and to the investor. This institution can also be considered from the standpoint of its effect upon the prices of its products and from the standpoint of its efficiency as a form of business organization. It is from the last two standpoints that I propose to discuss the question.

When the trusts were organized, most of them coming into existence during the five years beginning 1898, two advantages were claimed for this form of business organization: first, that the trusts would maintain more stable prices than were possible under conditions of competition, and second, that they would result in raising the standard of business efficiency. The advantages of price-maintenance were urged from two standpoints: first, the benefit to the companies directly affected, and second, the benefit to the public. It has been urged, and I believe that there is general agreement on this proposition, that irregular prices, because of the element of uncertainty which they introduce into business calculations, are highly objectionable; and that any institution or agency which results in maintaining prices unchanged for long periods of time, raising or lowering the level as fundamental conditions change, must, so far as it accomplishes these results, be approved. From the standpoint of the public, it has been urged that the prices which such companies charge, because they are collected from every buyer and because the manufacturer's profits are not sacrificed in long-term contracts in every season of dull trade, will be fixed at a lower level than is possible under competitive conditions. In other words, the claim was made in defense of the trusts, that the prices of the necessities of life, as well as of the materials and machinery of industry, would be lower as a

¹ A paper read before the Western Economic Society at Chicago, March 1, 1912.

result of the consolidation of large numbers of competitors under the control of a small number of holding companies. Greater stability of prices and lower prices—these were the most important arguments in favor of the industrial combinations.

It has also been urged on behalf of the industrial combinations that they have resulted in raising the standard of business efficiency. By uniting under a centralized control a large number of plants which had formerly been under separate managements, numerous advantages, it was claimed, would be realized. First, the centralization of offices and the dismissal of a large number of high-priced officials; second, the saving in cross freights; third, lower rate of interest on discounts, and broader credit; fourth, lower price on materials secured by ordering in larger quantities; fifth, the advantages of large capital in enlarging plants, in conducting expensive investigations with a view to reducing the cost of production, and in enlarging foreign trade; and sixth, the elimination of competitive advertising. It was also urged that the industrial combinations would have great advantages in dealing with organized labor, since by their institution labor and capital would deal on more equal terms than would be possible when a single manufacturer, at odds with his fellows, attempted to negotiate with the officers of a trade union, including the greater part of the skilled labor in his industry. Many other advantages were claimed for the trusts: the closer regulation of the middle-man, the reduction in the amount of bad debts, the closer restriction of contracts and credits, the improved position in dealing with railroads, the devoting of specialized plants to different products, the concentration of production at the best plants during periods of slack demand, the general distribution of the special knowledge and processes and patents of each plant, the improvement in the methods of accounting, the advantage of comparing the costs of one plant with those of others, and the perfection of factory organization in order to obtain the highest efficiency.

It has not been claimed, so far as my knowledge extends, by any disinterested defender of the trust as an institution, that a single large company, such, for example, as the Carnegie Steel Company before the formation of the United States Steel Corporation,

would not be managed with even greater efficiency and economy than the consolidation which absorbed it. Most of the advantages claimed for combination which have been enumerated were possessed by some concerns in each industry. Aside from the control of prices and the superior ability to negotiate with labor, no marked advantage over these large and well-equipped companies could be claimed for the consolidations which absorbed them. Probably something was lost in direct interest of owners. It was urged, however, that the formation of the trusts resulted in a higher average of business efficiency: that while it might even be conceded that the efficiency of particular plants might be greater under competition than under consolidation, the efficiency of all the plants in the industry, taken together, would be leveled up.

I have attempted, from an examination covering a ten-year period, to determine how far these predictions and claims have been borne out by results. I am strongly of the opinion that if it can be shown that the trusts have actually reduced prices, while at the same time keeping them more stable, and if it can be further shown that they have resulted in raising the standard of productive efficiency, any other sins which they may have committed should not be considered just cause for their destruction. If we have in the trust an institution which introduces a high degree of stability into business calculations because of the firmness with which it maintains reasonable prices; if we have an agency whereby the cost of production is reduced and the profits of industry earned from reasonable prices are increased, then we have an institution which demands not extinction but supervision, regulation, and control. If, on the other hand, as I think it is safe to say most people believe, the trusts are responsible for raising prices, and if they cannot justify themselves from the standpoint of efficiency of production, then the sooner they are dissolved into their original elements the better. The administration of President Taft is engaged in enforcing the Sherman Anti-Trust law in such a manner as to break up and dissolve these large combinations. The argument is made by a distinguished, although recent, critic of the President, that what is wanted is not destruction of these large enterprises but regulation. The defense of the trusts as an insti-

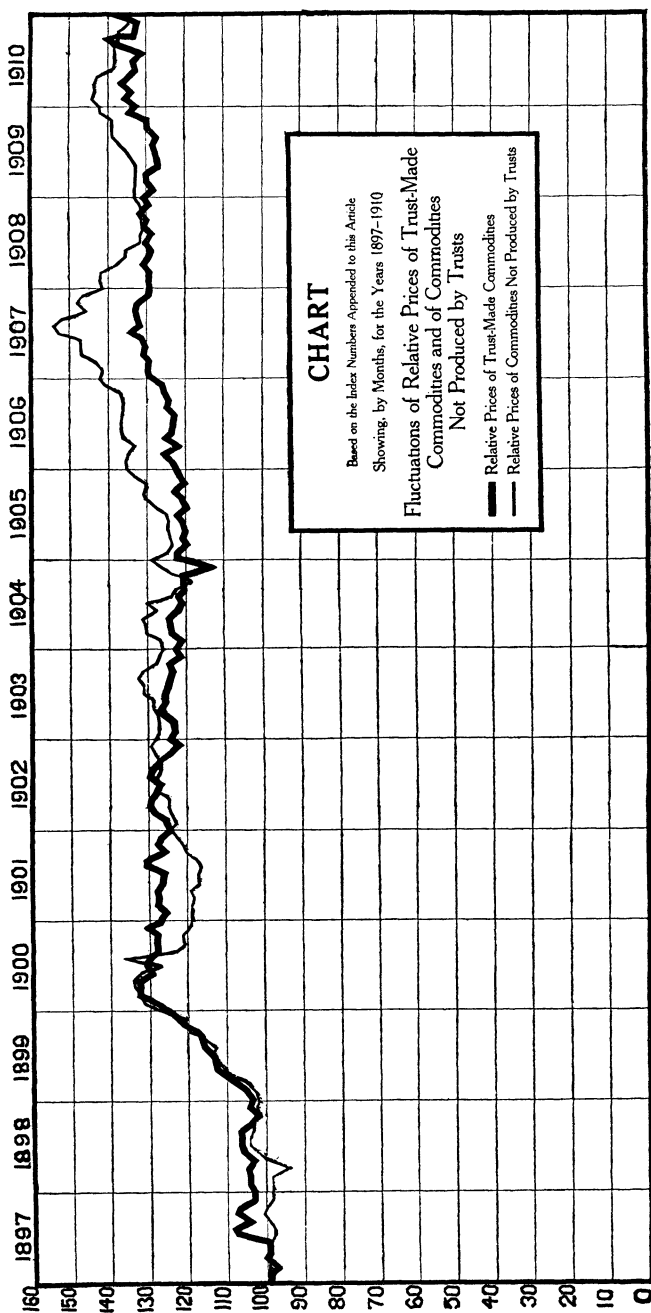
tution depends, therefore, upon the production of positive proof that they are of general business benefit. The American people will not permanently sustain a program of business regulation which is opposed to their welfare.

As my contribution to this discussion I desire to present, first, a comparison, extended over fourteen years, between the prices of those products in the production of which industrial combinations have been dominant or important, and the prices of those products which are produced under competitive conditions. The two lists are as follows:

TRUST	NON-TRUST
Anthracite coal	Manila rope
American cement	Bituminous coal (Youghiogeny)
Refined petroleum	New Orleans molasses
Cotton-seed oil	Pig iron (Bessemer, Pittsburgh)
Glucose	Bleached sheetings
News paper	Corn meal
Proof spirits	Yellow pine
Leather	Plain white oak
Wire nails	Print cloth
Steel rails	Glass tumblers
Raw linseed oil	Vici kid shoes
Pig lead	Sheet zinc
American fine salt	Flour (New York)
Plug tobacco	Cotton
Sulphuric acid	Bare copper wire
Granulated sugar	Wilton carpet
Cotton thread	Earthenware plates
Domestic parlor matches	Bleached shirtings

The prices selected have been those compiled by the Bureau of Labor. On the basis of the monthly quotations of these 36 commodities and taking the prices of January, 1897, as a base, index numbers have been prepared which will show the movement of the two classes of prices from 1897 to 1910.¹ These two price movements are represented on the accompanying chart. It is immediately apparent that from 1897 to 1900 the two lines move almost together, the fluctuations in one being almost parallel with the fluctuations in the other. From 1900 to 1910, the period when

¹ See Appendix, p. 371.



most of the industrial combinations were formed and when their control over prices and production was perfected, there is a striking divergence between the two lines. The line of trust products shows much smaller fluctuations and is, on the whole, much lower than the line of competitive prices. Particularly in 1902 and 1907 is the divergence apparent. Of even greater interest is the relative stability of the two price lines. Here again the trust has a considerable advantage, so far at least, as concerns large fluctuations. The advantage of the trust, on the points both of lower prices and of stable prices, is apparent and considerable. On their first claim, we may conclude that the trusts have justified their position.

When we come to consider the industrial combinations from the standpoint of business efficiency we have a more difficult problem. If these companies employed a uniform system of accounting, so that their costs of production and net profits could be accurately determined for an extended period, and if the same uniformity was generally followed by outside concerns in the same line of industry, there would be no difficulty in making an accurate comparison. The only conclusive test of business efficiency, eliminating monopolistic influence, is business profits. If, over an extended period, and making allowance for special conditions in each case, the profits of the trusts could be proven to have averaged materially higher than the average profits of the independent concerns, the conclusion would be plain that the trust is the superior agency of production, and that it would be unwise to go back to competitive conditions. If, on the other hand, it should appear, as Mr. Louis D. Brandeis, for example, claimed in his recent testimony before the Senate Committee on Interstate Commerce, that the trust is an inefficient agency of production, then it may possibly be considered desirable to break these companies up into smaller units, and, if the advantages of stable prices are conceded, to allow these units to form agreements whereby prices may still be maintained.

Unfortunately a satisfactory comparison of the character indicated is not possible from the evidence available. In the first place, only a small number of the companies concerning which information is desired publish their accounts in a form available

for comparison. I have found only 29 of the so-called trusts which show any degree of uniformity in their accounts. Then, too, the published accounts of the independent concerns are even more unsatisfactory, and finally, any comparison between trusts and independents would be vitiated by the fact that nearly all the large and efficiently managed concerns in any industry are already under the control of some industrial combination. To compare the results of the independent concerns which have arisen during the past decade, in the face of the trusts, with the results obtained by the trusts would be unfair and misleading.

We have, finally, to remark that in the profits of many of the trusts there is a very considerable degree of monopoly advantage, illustrated by the enormous profits which the American Tobacco Company made in the lines in which it was dominant, as compared with the lines in which it was subjected to competition. It is, therefore, impossible to make any satisfactory comparison of the kind indicated. All that I have been able to do is to obtain the figures of the net earnings from operation of 29 manufacturing holding companies, from 1902 to 1910, and reduce these to an index number with the profits of 1902 as a basis.¹ The results are as follows: Starting with 1902 as 100, we find an advance to 103.5 in 1903; then a decline to 92.2 in 1904; an advance from 104.6 in 1905 to 124.1 in 1906; a further advance to 134.8 in 1907; then a decline to 111.8 in 1908; an advance to 122.7 in 1909; and an advance to 137.7 in 1910. The figures for 1911 are not yet available but will undoubtedly show a considerable decline. We have, therefore, during this period of nine years an increase of about 37.7 per cent in the net earnings from operation of these 29

¹The list of companies whose profits from operation have been compiled is as follows: American Agricultural Chemical Co.; American Can Co.; American Car & Foundry Co.; (The) American Cotton Oil Co.; American Hide & Leather Co.; American Locomotive Co.; American Malt Corporation; American Smelting & Refining Co.; American Type Founders Co.; American Woolen Co.; American Writing Paper Co.; Chicago Pneumatic Tool Co.; Diamond Match Co.; Eastman Kodak Co.; General Chemical Co.; International Paper Co.; International Steam Pump Co.; National Enameling & Stamping Co.; National Lead Co.; Pennsylvania Steel Co.; Pittsburgh Coal Co.; Pressed Steel Car Co.; (The) Pullman Co.; Republic Iron & Steel Co.; (The) Union Bag & Paper Co.; Union Switch & Signal Co.; United Fruit Co.; United States Steel Corporation; Virginia-Carolina Chemical Co.

consolidations. This is a good though not a remarkable showing. An increase of 38 per cent in the net earnings of these companies in nine years, including a period of extraordinary industrial expansion along every line, and considering also the fact that in many cases these combinations have enjoyed some monopoly advantage, does not conclusively indicate that in the industrial trust an agency has been discovered which is destined to revolutionize our ideas of efficient business organization.

These conclusions may be checked by reference to the financial results of the combinations. I have compiled figures for 55 of these companies which show the following results: Of the number, 47 have outstanding issues of preferred stock. Of the 47, 30 have paid during the ten-year period from 1902 (or from the date of the organization if that date succeeded 1902) to 1911 regular dividends on preferred stock; 17 have either paid their regular dividends or no preferred dividends; only six out of the 47 can be considered in the no-dividend class. Of the 55 issues of common stock 13 have paid ten dividends in the ten years; two have paid nine dividends; five have paid eight; three have paid seven; one has paid six; four have paid five; one has paid four; five have paid three; two have paid two; and two have paid one dividend since the date of organization. Seventeen have paid no dividends at all, and 25 have paid no dividends on their common stock for the last three years. Of the dividend-paying companies the dividends of 27 have averaged from 2 to 7 per cent, of five from 2 to 10 per cent, and of six more than 10 per cent including extra dividends. Six companies have also declared scrip and stock dividends.

It will be remembered that the common stocks of the industrials represented the capitalization of the so-called economies of combination. Out of the profits of combination were to be paid the dividends on these common stocks. The record before us is not encouraging as to the extent and productivity of these economies. While the industrials have done extremely well in paying preferred dividends, their common stocks, taken as a class, have not reached an investment position even after this long period of operation, during which the economies of combination should have had time to come to full fruition. The present market values of

these industrial common stocks bear out the conclusion just expressed most conclusively.

In this case total market values would be misleading, owing to the high value and the large capital of a few companies. Individual prices in a large number of cases will give us an idea of the judgment of the stock market. Out of 64 issues listed on the New York Stock Exchange, 46, at the highest price obtained in 1911, sold below par, and only 18 at par or above. Of the common stocks in this list, 33 in number, only three sold above par—American Sugar Refining, International Harvester, and National Biscuit. The list of industrial common stocks contains a number of sore disappointments. Here we find Allis-Chalmers, American Malt-ing, American Can, American Linseed Oil, American Woolen, Central Leather, Corn Products Refining, Distillers Securities, International Paper, Pittsburgh Coal, United States Cast Iron Pipe and Foundry, and International Mercantile Marine, most of them confessed failures, which not only have not realized up to the present time, so far as common stock dividends are concerned, economies of combination represented by the common stocks, but also have in most cases been either unable, or only able with great difficulty to meet the preferred dividends. This is not a showing out of which a cordial indorsement can be given to the trust as an institution. Grant that most of these companies were grossly overcapitalized at the outset; grant that their large issues of cumulative preferred stock forced them from the beginning into a policy of excessive distribution; make every allowance for the difficulties of a new form of business organization—still the financial showing of the industrials is extremely bad. The successful companies are the exception. As a rule the financial record is most discouraging. During a decade of unparalleled industrial development, the trusts, starting with every advantage of large capital, well-equipped plants, financial connections, and skilled superintendence, have not succeeded.

It is impossible on the basis of these figures to indorse the trusts on the side of increased business efficiency. If we go no further than their record of performance, they have not justified the claims made for them.

These conclusions have a direct bearing upon the proposition now before the American people. While the trusts should be regulated or disintegrated, we must admit that the trusts have maintained stable prices and reasonable prices as compared with the prices of those commodities not produced by combination. This stability and reasonableness of prices is a public benefit which ought not to be sacrificed. The same result can, however, as we see in the understanding between the anthracite coal companies, be obtained by agreement among competitors. These agreements, whether allowed by the law or not, are likely in the long run to prevail. If, then, we can expect that no matter what the result of the present agitation against the trust may be, a return to the old conditions of cut-throat competition is unlikely; if we can anticipate that the discipline of the combination and consolidation movement has impressed upon those who will be in charge of these industries, whether in the form of consolidations or broken into smaller units, the advantages of co-operation, of free interchange of information, of the cultivation of mutual confidence among competitors, of the transformation of business enemies into business friends, with the result, as shown most conclusively in the steel industry, under the leadership of the United States Steel Corporation from 1908 to 1911, of preventing the demoralization of prices which prevailed at similar periods of depression, we need not fear that the dissolution of the trusts will be a step backward so far as the stability of prices is concerned.

I am not willing to express a positive opinion as to the industrial benefits to be achieved by the breaking up of these large and sometimes unwieldy combinations into smaller companies. The evidence before us does not indicate that these consolidations are particularly efficient. It is a reasonable presumption that the plan of dissolution followed in the case of the American Tobacco Company will not result in the sacrifice of any degree of productive efficiency, and that the separate boards of directors and separate staffs of officials may display greater energy and greater diligence in developing the business than has been possible under the centralized control. If the government continues its attack upon the trust, and if, as a result of its success, similar plans of dissolution

are adopted for all the consolidations, either by order of the court, or by voluntary action, which is certainly to be preferred, it is impossible to contemplate the resulting situation with the same degree of distrust and foreboding as if the trusts in the heyday of their prosperity had won a larger degree of financial success.

We should, in the event of a general trust dissolution, have a large number of smaller though well-equipped companies, perhaps for a time largely identical in group ownership, but with separate officials and directors. These companies, because they are smaller, admitting of a closer supervision, would be managed, it is safe to predict, with greater attention to detail than is possible with the large organization. At the same time, the identity of the stock, while it would encourage all other forms of competition, would discourage price-cutting whether legalized or not. Understandings between former allies as to prices, terms of sale, etc., will exist and they will be lived up to. In the end we should have a situation where the more serious abuses of competition would have been eliminated while its advantages had been preserved.

In view of these facts the apparent impossibility of securing either the repeal or the amendment of the Sherman anti-trust law, can be regarded with a degree of complacency. If the law is enforced—and we hope it will be enforced, while it is the law, even under the new conservative interpretation by the Supreme Court—we have it on the authority of the Attorney-General that at least one hundred industrial combinations may be proceeded against by the Department of Justice. If the resulting dissolutions do harm; if they close plants, throw men out of employment, stop dividends, and produce bankruptcy, then the Sherman law will not be allowed to go far on its path of destruction. It is impossible to believe that public sentiment would not revolt against such a campaign of business devastation.

If, on the other hand, the dissolution of the trusts closes no plants, throws no one out of employment, stops no interest, reduces no dividend; if, on the contrary, so far from producing these dire consequences, it gives determinate legality to investments which in their present form are badly tainted; if it lays to rest the ever-present menace of criminal prosecution; if it develops a body of

precedents which shall define the limits of large capitalistic activities; and if, finally, it retains the active working spirit of friendly co-operation among business men by which the rigors and severities of competition are softened, and its worst abuses eliminated, who shall say that the movement should not be allowed to run its course until industry in the United States is once more conducted in accordance with the law?

APPENDIX

The price-quotations on which the following index numbers are based are for commodities priced in the March Bulletins of the Bureau of Labor, for the years 1902-11, as follows:

TRUST COMMODITIES

Anthracite coal.—Stove. Average monthly selling price per ton f.o.b. New York Harbor. From 1903 on, price at tidewater New York Harbor.

American cement.—Portland. Price per barrel in New York on the first of each month. Original quotation from the *New York Journal of Commerce and Commercial Bulletin*.

Refined petroleum.—150° fire test, water white in barrels, packages included. Price per gallon in New York on the first of each month. Original quotation from the *Oil, Paint, and Drug Reporter*.

Cotton seed oil.—Summer yellow prime. Price per gallon in New York on the first of each month. Original quotations from the *Oil, Paint, and Drug Reporter*.

Glucose.—41° mixing. Price per 100 lbs. in New York on the first of each month. 41° and 42° mixing in 1901 to September, 1905; 41° and 42° September to December, 1905; 41°-43° in 1906 to 1907; May to December, 1907, 42°, and on to date. Original figures *New York Journal of Commerce and Commercial Bulletin*.

News paper.—Price per pound in New York on the first of each month. In 1897 prices for rag and wood paper. From 1898 on prices for wood. Original figures from the *New York Journal of Commerce and Commercial Bulletin*.

Proof spirits.—Average weekly price per gallon, including tax in Peoria, for first week of each month. In 1904, 1908 to 1910, price for first Tuesday of each month. Original figures from the *Peoria Herald-Transcript*.

Leather.—Sole, oak, dressed backs, heavy. Price per pound in New York on the first of each month. Original quotations from the *Shoe and Leather Reporter*.

Wire nails.—Monthly averages computed from weekly market quotations. Quotations from the *Iron Age*.

Steel rails.—Average monthly price per ton at mills in Pennsylvania. Original quotations from the Annual Statistical Reports of the American Iron and Steel Association.

Raw linseed oil.—City, in barrels. Price per gallon in New York on the first of each month. Original quotations from the *Oil, Paint, and Drug Reporter*.

Lead, pig.—Common domestic. Price per pound in New York on the first of each month. Original quotations from the *Iron Age*.

Salt, American fine.—Price per barrel in Chicago, based on a weekly average for the first week of each month. From 1901 on, prices for medium salt. Original figures from the annual reports of the Chicago Board of Trade.

Plug tobacco.—Price per pound in New York on the first of each month. To September, 1906, price for "Horseshoe"; from September, 1906, on, for "Climax."

Sulphuric acid.—66°. Price per pound in New York on the first of each month. Original quotations from the *Oil, Paint, and Drug Reporter*.

Granulated sugar.—Price per pound in New York on Thursday of the first week of each month. Price includes import duty of 40 per cent *ad valorem* to July 24, 1897; from July 24, 1897, to date 1.95 c. duty per pound. Original quotations from *Willet and Gray's Weekly Statistical Sugar Trade Journal*.

Cotton thread.—6-cord; 200-yard spools. J. & P. Coats. Price per spool, freight paid, on the first of each month.

Matches.—Parlor and domestic. Price per gross of boxes (200's) in New York on the first of each month. Original quotations from the *Merchants' Review*.

NON-TRUST COMMODITIES

Manila rope.— $\frac{3}{8}$ -inch and base sizes. Price per pound f.o.b. or factory in New York on the first of each month.

Bituminous coal.—Pittsburgh (Youghiogeny). Price per bushel on the first Tuesday of each month. Cincinnati afloat.

New Orleans molasses.—Open kettle. Price per gallon in New York on the first of each month. Original quotations from the *New York Journal of Commerce and Commercial Bulletin*.

Pig iron (Bessemer Pittsburgh).—Monthly averages computed from weekly market quotations as given in the *Iron Age*.

Bleached sheetings.—10.4 Wamsutta S.T. Price per yard on the first of each month.

Corn meal.—Fine yellow. Price per bag of 100 pounds in New York on the first of each month. Original quotations from the *New York Journal of Commerce and Commercial Bulletin*.

Yellow pine.—Long Leaf, boards, heart face sidings, 1 inch and $1\frac{1}{4}$ inch. Price per M feet in New York on the first of each month. Original quotations from the *New York Lumber Trade Journal*.

Plain white oak.—1 inch, 6 inches and up, wide. Price per M feet in New York on the first of each month. Original quotations from the *New York Lumber Trade Journal*.

Print cloth.—28 inch 64×64. Average weekly price per yard for the first week of each month.

Glass tumblers.—Table, $\frac{1}{3}$ of a pint. Price per dozen f.o.b. factory on the first of each month.

Vici kid shoes.—Men's, Goodyear welt. Price per pair on the first of each month.

Sheet zinc.—Ordinary numbers and sizes, packed in 600-pound casts. Price per 100 pounds f.o.b. La Salle, Ill., on the first of each month.

Flour.—Wheat, winter straights. Price per barrel in New York on Tuesday of the first week of each month. Original quotations from the New York Produce Exchange's Annual Reports.

Cotton.—Upland middling. Price per pound in New York on Tuesday of the first week of each month. Original quotations from the *New York Journal of Commerce and Commercial Bulletin*.

Bare copper wire.—Quarterly quotations only to 1901. From 1901 on,

INDEX NUMBERS¹
EIGHTEEN COMMODITIES EACH

	Non-Trust	Trust		Non-Trust	Trust
1897 January.....	100.0	100.0	1901 January.....	119.2	126.5
February.....	99.8	98.3	February.....	119.1	128.7
March.....	99.8	100.2	March.....	118.7	128.6
April.....	99.4	99.9	April.....	119.5	128.7
May.....	99.2	99.9	May.....	117.3	128.5
June.....	98.2	108.0	June.....	117.5	126.9
July.....	98.2	109.0	July.....	117.0	131.3
August.....	99.3	105.7	August.....	118.2	131.1
September.....	100.9	108.3	September.....	120.1	126.8
October.....	99.9	107.2	October.....	121.3	128.3
November.....	98.5	104.0	November.....	123.3	127.4
December.....	98.7	104.0	December.....	124.4	125.9
1898 January.....	98.7	104.9	1902 January.....	123.7	126.2
February.....	98.7	104.9	February.....	124.3	129.1
March.....	94.6	105.4	March.....	125.2	130.2
April.....	100.2	104.1	April.....	125.2	129.8
May.....	102.2	106.5	May.....	128.0	128.8
June.....	104.4	107.1	June.....	128.0	128.3
July.....	104.3	107.1	July.....	128.0	130.4
August.....	103.8	107.2	August.....	127.3	129.6
September.....	103.5	104.5	September.....	127.3	127.7
October.....	101.9	103.2	October.....	128.6	125.2
November.....	102.6	104.8	November.....	129.5	123.1
December.....	102.2	104.1	December.....	128.3	125.4
1899 January.....	102.7	105.9	1903 January.....	127.8	124.4
February.....	104.5	108.1	February.....	127.8	124.5
March.....	108.3	110.5	March.....	127.9	127.2
April.....	110.8	113.7	April.....	128.8	127.8
May.....	112.2	113.9	May.....	128.9	126.4
June.....	114.4	114.6	June.....	131.3	126.3
July.....	113.6	116.1	July.....	131.3	125.8
August.....	115.5	116.8	August.....	132.4	125.2
September.....	119.9	119.0	September.....	131.5	124.6
October.....	121.3	122.0	October.....	128.2	125.4
November.....	121.4	124.0	November.....	127.4	122.5
December.....	127.3	127.2	December.....	126.5	123.7
1900 January.....	131.6	130.1	1904 January.....	127.1	122.3
February.....	132.1	133.3	February.....	130.5	124.5
March.....	134.0	133.4	March.....	130.7	124.7
April.....	134.1	133.6	April.....	131.5	125.2
May.....	131.9	130.5	May.....	128.2	123.3
June.....	128.3	131.3	June.....	130.4	122.0
July.....	136.9	131.0	July.....	124.2	122.8
August.....	123.5	128.8	August.....	122.9	121.4
September.....	121.1	128.9	September.....	119.0	121.5
October.....	121.2	128.8	October.....	123.9	121.6
November.....	119.7	131.0	November.....	126.8	114.8
December.....	119.1	128.0	December.....	129.3	123.3

¹ NOTE.—The writer is indebted to Mr. W. S. Stevens and Mr. E. M. Patterson of the teaching staff of the Wharton School of Finance and Commerce, for assistance in preparing the statistics upon which the conclusions of this paper are based.

INDEX NUMBERS—*Continued*

	Non-Trust	Trust		Non-Trust	Trust
1905 January.....	125.1	122.9	1908 January.....	142.7	130.1
February....	124.0	120.4	February....	142.2	130.0
March.....	124.4	121.7	March.....	138.5	131.8
April.....	124.5	120.9	April.....	136.0	130.1
May.....	124.5	121.8	May.....	135.9	129.8
June.....	125.5	122.8	June.....	132.0	131.2
July.....	128.3	121.0	July.....	131.8	129.8
August.....	130.5	121.8	August.....	131.5	131.0
September ..	130.7	123.8	September ..	130.1	131.4
October.....	130.5	121.5	October.....	131.7	132.0
November ..	133.7	122.2	November ..	132.1	130.3
December...	135.5	123.0	December...	133.3	131.5
1906 January.....	135.9	124.5	1909 January.....	133.3	129.2
February....	135.2	126.3	February....	133.2	130.8
March.....	133.7	122.7	March.....	133.1	130.8
April.....	136.5	126.1	April.....	133.0	128.0
May.....	136.7	124.4	May.....	134.0	128.2
June.....	136.8	124.2	June.....	135.4	128.5
July.....	136.8	123.9	July.....	137.3	129.0
August.....	136.6	125.7	August.....	138.9	128.5
September ..	136.6	125.3	September ..	138.9	130.4
October.....	137.6	126.3	October.....	138.9	130.8
November ..	141.1	126.8	November ..	142.2	135.4
December...	124.3	130.0	December...	142.4	133.7
1907 January.....	142.1	130.2	1910 January.....	144.4	136.7
February....	143.8	130.2	February....	143.9	135.2
March.....	147.2	131.7	March.....	143.8	137.2
April.....	147.5	131.4	April.....	142.9	135.6
May.....	147.7	131.8	May.....	139.2	133.8
June.....	153.8	135.3	June.....	138.6	134.0
July.....	154.5	132.9	July.....	138.6	132.4
August.....	152.3	133.1	August.....	138.6	138.4
September ..	146.5	133.3	September ..	137.4	141.4
October.....	148.3	133.1	October.....	137.4	133.7
November ..	146.9	130.4	November ..	135.1	133.3
December...	142.1	130.1	December...	135.2	138.3

price per pound in New York on the first of each month for No. 8, B. & S. gauge, and heavier.

Wilton carpet.—5-frame Bigelow. Price per yard on the first of each month.

Earthenware plates.—White granite, 7 inch. Price per dozen f.o.b. Trenton, N.J., on the first of each month. From 1902 to 1905 price per dozen to purchasers of bills amounting to \$8,000.

Bleached shirtings.—4-4 Wamsutta ^{<O>}_{xx}. Price per yard on the first of each month.

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